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Rural Community Colleges

Creating Institutional Hybrids for the New Economy

Stuart A. Rosenfeld

ommunity colleges have become highly valued institutions in rural America, successfully taking on an expanding hybrid of missions to meet the needs of a changing rural economy. The best among them combine many of the objectives and services long provided to agriculture by the rural school districts, the Grange, cooperative extension service, and the experiment stations. Today's community colleges educate from post-high school through retirement, train for paid employment as well as hobbies, catalyze improvements in their economies and communities, and attract arts and entertainment.

The goals of the new community college encompass social, economic, and civic outcomes. Extending itself to meet the rapidly growing market for skills and services, however, raises a new set of concerns. What are the limits to delivering quality services in rural areas, and at what point does the weight of too many expectations signal diminishing returns? This

Stuart A. Rosenfeld is principal and founder of Regional Technology Strategies, Inc. in Carrboro, North Carolina, and founder of the Trans-Atlantic Technology and Training Alliance, a network of community colleges from the U.S. South, Europe, and South Africa. Once a stepping stone to higher education, the rural community college has evolved into a multipurpose institution that meets lifelong learning needs and the economy's demand for information and skills. The best institutions merge an applied higher education with extension-like services for local industry. But rural community colleges are facing new challenges, including new competition from other providers, expanding student diversity, rising credential requirements, and the digital divide. All of this leads to an even greater proliferation of missions and expectations, and possible growing pains for smaller rural community colleges.

article traces the path taken by the rural community college to now, describes its many roles, and speculates on its future.

Moving Through the 20th Century

A half century ago, nonuniversity post-secondary education, which was mainly conducted at junior colleges, had a much simpler and more straightforward purpose. The junior college was a convenient gateway to a 4-year degree program for many rural youth because it was closer to home and less expensive. "Vocational" education was a separate track in the secondary school curriculum and, beginning in the 1960s and continuing through the 1970s, was offered to rural high school students and adults through local vocational centers that greatly expanded the selection and resources of available programs.

The number of U.S. community colleges nearly doubled in the 1960s, when the nonuniversity post-secondary sector was

reshaped into comprehensive institutions with legitimate regional foci and few entrance restrictions. Community colleges began to offer more technical and vocational programs—often in competition with the rural vocational centers. Some State community college systems, mostly in the South, enthusiastically adopted their new economic development missions. Some States created special units or programs that allowed them to deliver customized and noncredit training to employees of new and expanding industries under less restrictive conditions than educational policy allowed. But other colleges were in places that did not immediately embrace economic development. As recently as 1988, less than half of 200 rural colleges surveyed included economic development in their mission statements, and only a third had allied themselves with community economic development efforts.



Distributing Technology and Skills

Hagerstown Community College, in the Appalachian region of western Maryland, is attempting to foster an area where a high-skilled workforce can thrive. The Advanced Technology Center (ATC) was established in 1989 after several major industries restructured their operations, including massive layoffs that led to double-digit unemployment. The college, working with local development agencies, set out several goals to help transform the local economy: workforce development, increased technology transfer, an emphasis on shared technical resources, and a program of business incubation. The ATC now includes 4 specialized centers and 14 specialized laboratories. As the region's economy became dependent on entrepreneurial activity, the Technical Innovation Center (TIC) was a natural next step. Opened in 1994, the TIC has a 30,000-square-foot facility where businesses can launch new products. To date, the center is at capacity with 34 tenants and can document 171 created or retained jobs.

In the 1980s, the community college mission again expandedthis time to meet the demands of small and midsized enterprises (SMEs) for the new technical and organizational skills associated with the adoption of new technologies. The cooperative extension model, frequently invoked due to its success in distributing public services, was indeed the model many colleges adopted. At first, the technology diffusion model was not the university-based programs model created by the Smith Lever Act of 1914 (which institutionalized cooperative extension), but instead was that model's origin, the local demonstration farm. This model, conceived by Seaman Knapp in 1894, helped farmers to learn about and then adapt new agricultural technologies and practices. Leading community colleges, such as those exemplified by member colleges of the Consortium for Manufacturing Competitiveness (CMC) in the rural South, established advanced technology centers where they could demonstrate to SMEs the potential and use of the new technologies they believed were needed to survive in the

global economy (see "Distributing Technology and Skills").

The next transition in community colleges, which began in the 1990s and is ongoing, reflects an information-based economy and the ubiquity of the Internet. The computer and Internet are altering the ways that colleges teach, and what and how people learn. Colleges are knitting together webbased and classroom courses to create more flexible degrees for working and rural people. At the same time, many employers are eschewing conventional credentials in favor of software-vendor created and delivered certifications (often within the community college).

Each of these transitions has been accompanied by dramatic changes in the composition of community college enrollment. At first, the junior college prepped the predominantly young White male of European descent for the university. Next, the rise of vocational education and economic development missions attracted employed, older, and usually part-time students, and marked the emergence of noncredit and employer-based enrollments. Beginning in the late 1960s, when the community college became a strong democratizing force, the open-door policies attracted more women, African Americans, and Latinos, especially in the rural South and Southwest.

In 2000, 1,132 community colleges in the U.S. (995 public institutions) enrolled 5.4 million credit and another 5 million noncredit students and conferred nearly 700,000 certificates and degrees. The largest number of public community colleges are located in rural areas and towns, although they are on average smaller and enroll a smaller proportion of students (table 1).

Students span all levels of educational interest and ability, and are increasingly new immigrants, some of whom lack language and

Table 1 Public community colleges by location, 1998; colleges and enrollments

Location	Percent colleges	Percent enrollment	Average students
Large city or fringe	29	52	9,392
Mid-size city or fringe	30	32	5,553
Rural or town	40	17	2,276

Source: National Center for Education Statistics, IPEDS electronic data file, 2000.

Note: Percentages may not add to 100 due to rounding.



employment skills for the U.S. workplace. More and more college graduates are returning to community colleges to explore new careers, as are incumbent workers who want to upgrade skills. About a quarter of all students entering community college say they are working toward a baccalaureate degree, and 60 percent state clear occupational goals.

Community college students are more diverse than those in other public educational institutions:

- 58 percent of students are female.
- Community colleges enroll 46
 percent of all African American,
 55 percent of all Hispanic, and
 55 percent of all Native
 American students in higher
 education.
- Half of community college students work part time and a third work full time.
- 30 percent of all students enrolled full time also work full time.
- The average age of a student is 29 years.
- Almost a third of students receive some financial aid.

Are Community Colleges All-Purpose Institutions?

As rural economies have become more complex and diversified and as the demands for education and training have increased, community colleges have blossomed. While continuing to prepare youth for 4-year programs, the most proactive and innovative colleges have become leading—and

often sole—sources of new skills and knowledge, valued repositories of information, effective brokers of employment as well as business-related and social services, and focal points for community activities and action. Different colleges, of course, take these various responsibilities to different levels depending, for example, on the availability of alternatives for each role, the interests and motivation of their presidents and boards of trustees, and the background of their faculty.

The rural community college has proven very astute in meeting the challenges of the information economy, with the entrepreneur and innovator schools paving the way and the imitators generating scale and adding new enhancements and improvements. The once rare advanced technology center has become common practice, and partnerships the rule. Even—perhaps especially—the most rural colleges use the Internet to access educational and intellectual resources worldwide.

But today, rural colleges are facing what may be their biggest challenges. The new landscape includes:

- Increasing reliance on global connections, even in isolated environments:
- Rising credential and skill needs of employers and academic aspirations of students;
- Low skill and literacy levels among applicants;
- Increasing diversity in terms of race, ethnicity, and academic achievement;
- Job hopping and multitasking;

- Declining recruitment successes in rural areas;
- A proliferation of missions that threatens to fragment colleges' resources;
- New competition from corporate, for-profit, and web-based programs; and
- The Internet and growing demands for information technology skills and certification.

Meeting and greeting globalization. People in rural communities, who are as strongly affected by the global economy as urban dwellers, have fewer opportunities to experience the global economy firsthand; they have less regular contact with foreign employers, competitors, or visitors. Similarly, students in community colleges have fewer opportunities than university students to take part in exchange programs or to study abroad. Globalization is typically made tangible only with exposure to, say, a Japanese branch plant or Latino factory worker. Rural community colleges could benefit by expanding their connections to other cultures and economies. The Trans-Atlantic Technology and Training Alliance a network that includes southern and predominantly rural colleges along with European and South African technical colleges— is building such bridges.

Rising aspirations and changing expectations. Despite the growth of community college programs and enrollments, many entering students aim for higher degrees. In 1995, 42 percent planned to get a baccalaureate degree and 37 percent planned to get a postgraduate degree. However, students who say they are in a transfer program are



still very much experimenters, taking a variety of courses. One reason for these aspirations is that, with the exception of licensed occupations such as nursing and electricians, employment requirements that specify associate degrees are unusual. For most occupations, the 2-year associate degree has never gained the respect among U.S. employers that it has in many European nations.

Instead, employers ask for experience and/or a baccalaureate degree. Many employers will say, however, that holding a BA/BS is less important for its technical knowledge per se than it is as a proxy for persistence, commitment, higher literacy levels, and stronger problem-solving and thinking skills. Parents also want the higher degrees for their children, both for the status it confers and as a rational economic choice likely to result in higher incomes. This may lead to upward credential creep in rural colleges, as it has in the polytechnics of Europe, and toward longer and more rigorous occupational community college programs and, ultimately, applied baccalaureates. This would put greater pressure on the readiness programs to keep the community college path open for the most disadvantaged students.

Getting ready. Most youths or adults first enrolling in the rural (or urban) community college lack the skills and knowledge to begin a program of study. Public high schools graduate too many who lack the basics, yet who aspire to higher education. Community colleges, pledged in this Nation to accept everyone, must repeat some of the secondary curriculum, and tailor it to an environment appropriate for working adults. Rural community colleges, often too small to offer the full range of

remedial courses without limiting their occupational programs, are even harder pressed.

Dealing with diversity. In some rural areas of the South and South west, diversity historically has meant meeting the needs of Black, Hispanic, and Native American students, many of whom are the first to attend college in their families. Those populations are increasing, and two-thirds of the population growth in the rural South in the next quarter century is expected to be from minorities. But new immigrants are coming from Asia, the Middle East, and Eastern Europe, and they are not all settling in the cities. "Diversity" now includes students from dozens of ethnic backgrounds, and it is becoming an issue in all rural areas across the Nation. Thus, rural colleges must accommodate a greater number and wider range of students, many of whom do not speak English as a first—or even second—language and who are not acclimated to the U.S. society or workplace. Rural colleges often lack the necessary support services and skills to meet the needs of such a wide range of students.

Accommodating careening career paths. Education is becoming a true lifelong activity. The typical student of today's rural community college is not the 18-yearold liberal arts student. The average age of the student population is nearly 30, and many are married and have families. Nearly twothirds are working and more than a third are working full time. The majority of students are not enrolled full time in degree programs but are taking courses (about half of enrollments are in noncredit courses); they are either people right out of high school or at midcareer exploring further options.

Many have accumulated credits from a variety of different institutions and expect to mix and match them to arrive at their credential goals. Increasingly, students already have BA/BS degrees and want to either pursue a different career or upgrade their skills. A recent study found that almost one in three employed people in the rural South had considered changing jobs during the previous year. Some students want only very specific skills or certifications to meet work requirements. In March 2000, a survey of a major newspaper's want ads for "technology employment" found that one in seven specified an information technologies (IT) industry certification.

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Growing entrepreneurs. The halcyon plant recruitment days of the 1960s and 1970s have ended for rural America, and many rural areas are beginning to realize that they have to build their own economies. Thus, community colleges, which have typically prepared people for employment, not self-employment, must refocus their curriculum and resources to support an indigenous economy of new and expanding businesses. The Appalachian Regional Commission has done so with its entrepreneurial initiative, which supports, in part, efforts such as Haywood Community College's entrepreneurship center (see



Growing Entrepreneurs

Haywood County sits on the western border of North Carolina in the Great Smoky Mountain Range. Its primary sources of income have been manufacturing and tourism, but recent declines in manufacturing have hurt the economy. The community college believed that entrepreneurship was the key to long-term economic growth. In 1990, Haywood Community College (HCC) started the Entrepreneurial Learning Initiative (ELI) to foster entrepreneurship throughout all college curricula, to make entrepreneurs out of all students, regardless of field of study. This is accomplished through requiring all craft and production students to take business courses, offering Rural Entrepreneurship through Action Learning (REAL), and imbedding entrepreneurial competencies into technical courses. The college is developing an Entrepreneurial Resource Center, organizes an annual entrepreneurial conference, establishes networks of entrepreneurs, publishes a quarterly entrepreneurial newsletter, is creating craft studio incubators in the region, and supports a small business center. From 1992 to 1998, 64 percent of the 89 HCC graduates started businesses. As of December 1999, 91 percent of those businesses were still in operation.

"Growing Entrepreneurs") and Hagerstown Community College's new business incubator (see "Distributing Technology and Skills").

Facing new competition. Community colleges compete with a growing private sector educational establishment. The competition includes for-profit and proprietary schools like the University of Phoenix and DeVry, which offer classes nationwide, as well as corporate "universities" like Motorola in San Jose, Saturn in Nashville, and Ford in Detroit (there are more than 1,600 such corporate colleges). Other competition comes from the burgeoning Internet-based education and training programs being developed at both public and private schools. Despite the growth, there are still few quality control mechanisms or ways for consumers to evaluate and compare the new competitors.

Taking to the Internet. The impact of IT and ubiquity of the Internet (at least among middle and upper income classes and in urban areas) signal not only a shift in

industrial mix, but also a fundamental change in the way work is organized. The IT boom also has altered the mix of people who are hired, generating a demand for IT specialists and users that now far exceeds supply. Small and large companies, even in rural areas, are adopting e-commerce and e-business to communicate, supported by colleges such as Oklahoma State University at Okmulgee (see "Networking Its Customers"). IT is also increasing the number of corporate certification programs being offered at community colleges, and the demand for certifications to accompany traditional credentials.

What Are the Limits and the Challenges for Tomorrow's Rural Community Colleges?

Although rural communities have embraced community colleges, the employment landscape continues to change, both in terms of sectors and occupational mix within sectors. Desk work is an ever-increasing proportion of manufacturing employment, and as dependence on IT grows, it is

becoming the better paying, higher status, and more desired work. As David McGranahan discovered, high industrial growth in rural counties is now associated with high levels of academic attainment—a turnabout from the 1960s and 1970s when manufacturing jobs fled to areas in the South with low levels of education. But at the same time, the dwindling attractiveness of skilled industrial jobs as the workforce ages is creating serious skill shortages among manufacturers in many rural areas, and many view community colleges as their best hope for reversing that situation.

Competition from web-based education, corporate and for-profit colleges, and 4-year institutions will become much tougher for community colleges. While rural community colleges cannot match the scope of the competition, the best colleges will compete by their ability to teach in a context that is appropriate and relevant to rural economies and to meet the needs of students requiring special attention. They will also co-opt some of the competition by, for example, offering corporate training onsite, integrating web-based courses with their own, and working out reciprocal exchange agreements for credits with other 2- and 4-year colleges. This will be especially helpful to the smaller rural colleges as a multiplier for their internal capacities. Colorado's community colleges, for example, have an innovative e-commerce initiative that offers employers access to workshops and consultation for specific needs. Small business operators can enroll in subjects from "e-marketing" to "legal issues in e-commerce," employees can try career paths in the computer industry, and high school students can begin careers in e-commerce.



Learners and learning organizations will become more diverse and demanding. As a result, alliances among institutions and with employers and support services both local and nonlocal—will become more valued and necessary. A more diverse learner population will also require extensive support services, particularly on the front end to get nontraditional learners ready for regional employment and social life. The most successful rural community colleges will stake out a niche—most likely related to an industry, occupational cluster, or a key technology—on which to build a national and international reputation.

The most successful rural economies will most likely develop in the most effective learning regions, and the best colleges will ultimately position themselves at the heart of these learning regions. While it is difficult to define the concrete actions that bring about a learning region, most experts believe it is based on a social infrastructure that supports the easy diffusion of knowledge and skills. Associative behavior must come to characterize the rural community college, which will act as a systems integrator, broker services and information, and break down the barriers that result from scale and distance. Rather than trying to meet all needs, community colleges will need to establish even more alliances with organizations that complement and supplement their own strengths.

Finally, the Internet will alter learning and the role of rural community colleges. With education readily available from remote sites, community colleges will have to find ways to add value to the learning process and market themselves differently. They may have to emphasize programs that demand physical laboratories and/or equipment and courses that are enhanced by interaction. As community colleges are asked to be more flexible in how and where they offer courses, they may have to engender a community of scholars, a trait generally associated with universities. Successful colleges will be regionally committed and globally connected, possess a store of technical expertise and knowledge, adapt quickly to change, and successfully bridge the gap between civic and economic

responsibilities as well as individual and industry interests.

Ultimately, the best community colleges will find a niche in which they can truly excel, identify gaps to fill in the regional economy, and help citizens with special needs climb career ladders. One of the strengths of the community college is the scope of its mission; one of its weaknesses is that it spreads itself too thin when it ought to stay focused on its postsecondary educational goal. These conflicting strategies in part reflect philosophies of college leadership, but also derive from State policies.

Missions can grow both horizontally and vertically. Horizontal growth means expanding services for all types of employment while vertical growth comes from accumulating expertise for a certain sector of the economy. Most colleges

Networking Its Customers

The Northeast Oklahoma Manufacturers Council (NEOMC) is a striking example of how a technical college, in this case Oklahoma State University's Technical Branch at Okmulgee, can facilitate and maintain strong interfirm collaboration. NEOMC, which began in 1993, now has over 80 active members drawn from small and medium-sized manufacturing firms that comprise the region's economy. The network offers members several benefits, including increased opportunities to jointly bid on projects, increased productivity and local economic growth through cultivation of local vendors and suppliers, and increased quality and quality assurance programs. All members are required to have e-commerce, and the college has created a single e-business site for Council members for finding and responding to contract opportunities collectively or individually. The network sponsors incumbent worker training and works closely with the 2-year college to encourage manufacturing as a career for both college and high school students.

choose a middle course—maintaining a range of programs but picking a niche, usually related to a dominant industry, and developing it more fully than other programs. Alabama Southern Community College in Thomas, for example, has established a Center for the Chemical and Pulp Paper Industry. Great Basin Community College in Elko, Nevada, has a special program

to train workers for the gold mining industry.

Even with the increased competition for education and training, rural community colleges invariably will have to fill a greater array of needs than urban colleges if only because diseconomies of scale make other sources of training and assistance scarce. It will take strong leadership, however, for rural

colleges to be responsive to the economy's needs without losing their commitment to independent learning and inquiry, to integrate credit with noncredit programs and academic with vocational courses, and to select goals they can meet most effectively and relinquish those that can better be met by others. RA

For Further Reading . . .

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